عنوان مقاله:

The production of a various metal oxide nanoparticles by sol-gel dip coating technique and investigate their antibacterial properties

محل انتشار:

سومین کنگره بین المللی علوم و مهندسی (سال: 1398)

تعداد صفحات اصل مقاله: 20

نویسنده:

Mohammad javadi - *B.Sc. Student of Applied Chemistry, Islamic Azad University of Medical Science, Tehran, Iran*

خلاصه مقاله:

Today, due to the unique physical and chemical properties of nanoparticles in inhibiting bacterial growth, research on nanoparticles and their applications as antimicrobial agents has increased. Due to their limited size and high density, oxide nanoparticles can be physically and chemically unique. Metal elements are also capable of producing a great variety of oxide compounds. Therefore, in this research, metal oxide nanoparticles such as MgO and TiO2 were examined. These metal oxide nanoparticles were synthesized by sol-gel dip coating technique. In this paper, the antibacterial properties of the produced metal oxide nanoparticles were investigated in particular. XRD spectra were used to study the crystal structure. The results showed that among the studied composites, MgO film in addition to its antibacterial properties, in the SBF test, formed a layer of apatite and was compatible with osteoblast cells.

کلمات کلیدی:

Hilbert space,Hypercyclic criterion,Hypercyclic tuple, Hypercyclic vector.